

Abstracts

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medication; “appropriate therapy”) and CHBNAi (CUs not using any anti-inflammatory medication). Univariate analyses for continuous variables was performed using Mann-Whitney U test; and multivariate logistic regression was performed to predict the probability of being on appropriate therapy. **RESULTS:** A total of 1127 chronic users were identified (474 before and 653 after the introduction of the guidelines). A higher proportion of CHBYAi patients were found after the introduction of the guidelines (7%, Chi-square test, p -value = 0.041). However, both before and after the introduction of the guidelines the CHBNAi had significantly fewer asthma-related total (physician, ER and hospital) visits and costs (all p -value = 0.000). Multivariate logistic regression results indicated that total asthma-related visits was significantly associated with the odds of being on appropriate therapy. Before the guidelines, for every asthma related visit the odds of being on appropriate guidelines was found to be 1.544 (95% CI: 1.327–1.797); for every asthma related visit the odds of being on appropriate therapy was found to be 1.937 (95%CI: 1.624–2.309). **CONCLUSION:** We would have expected a higher health care utilization (visits & cost) for the CHBNAi group but we could not conclude this.

PAA13

COSTS FOR ASTHMA-RELATED MEDICAL SERVICES AND PRESCRIPTION MEDICATIONS IN A STATE MEDICAID PROGRAM

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Previous studies have shown that costs for asthma care tend to be higher among recipients of Medicaid compared to patients covered by private insurance. **OBJECTIVE:** Report the costs for asthma-related health care in a state Medicaid Program. **METHODS:** Medicaid medical services claims with a primary ICD-9 diagnosis code for asthma dated 2002 were extracted. Matching claims for asthma-related prescription medications also were collected. Costs for outpatient visits, emergency department (ED) visits, and prescriptions were based on dollars reimbursed by Medicaid. Costs for hospitalizations were estimated based on average DRG reimbursements. **RESULTS:** There were 16,573 recipients with claims for asthma. Among demographic groups, a majority of recipients were younger than 15 years (44%), female (58%), and white (93%). Medicaid paid roughly \$12.9 million for asthma-related medical services and prescriptions, or an average of \$779 per recipient with asthma. A majority of the dollars were paid for services and prescriptions utilized by adults between 21 and 64 years of age (49%), females (61%), and caucasians (93%). Hospitalization costs amounted to \$3.5 million (27% of the total) at an average cost of nearly \$4000 per admission. ED costs equaled over \$619,000 (5% of the total) at an average cost of \$169 per visit. Outpatient costs were nearly \$2.4 million (19% of the total) at an average cost of \$83 per visit. Prescription costs totaled \$6.2 million (48% of the total) for an average cost of \$51 per prescription. A majority of the dollars paid for prescriptions were for leukotriene modifiers (33%), short-acting beta-agonists (23%), and inhaled corticosteroids (21%). **CONCLUSIONS:** Asthma is responsible for a substantial consumption of economic resources of the Medicaid Program. Roughly half of the dollars Medicaid spends for asthma care is for medical services and half for prescription drugs. Hospitalizations account for a majority of medical services costs.

HP2/PAA14

THE EFFECT OF MEDICAID COVERAGE DECISIONS ON NON-SEDATING ANTIHISTAMINE UTILIZATION AND SPENDING FOLLOWING OVER-THE-COUNTER AVAILABILITY OF LORATADINE

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OBJECTIVES: This study evaluates the effect of over-the-counter (OTC) availability of loratadine on utilization and spending in a state Medicaid population without OTC coverage. Using a subset of nearly 100,000 enrollees before and after loratadine OTC availability, the specific objectives of this study were to: 1) evaluate product switching behavior; 2) describe non-sedating antihistamine utilization patterns; and 3) describe non-sedating antihistamine expenditures and their response to OTC availability. **METHODS:** The study was conducted retrospectively using paid pharmacy claims for a subset of Medicaid beneficiaries. Non-sedating antihistamine use was evaluated for two 12 month intervals encompassing July 1, 2001 through June 30, 2003. Within each interval, the rate of product switching between the first 5 months and last 5 months was evaluated. Trends in utilization and spending were tracked for the entire 24-month period. **RESULTS:** Beneficiaries using loratadine in the OTC availability interval were 2.4 (95% CI; 2.08–2.41) times more likely to switch to a different non-sedating antihistamine and 1.09 (95% CI: 1.08–1.12) times more likely to not have a non-sedating antihistamine claim than beneficiaries in the non-OTC availability interval. The largest gain in market share was observed for cetirizine, although desloratadine accounted for the largest switch rate from loratadine. During the first 12 months of the study, non-sedating antihistamine expenditures increased by nearly \$28,000 per month. Despite availability of a less costly alternative, expenditures increased by \$13,000 per month during the last 12 months. **CONCLUSIONS:** Although utilization and spending tapered slightly after the introduction of loratadine OTC, the majority of beneficiaries using loratadine switched to a covered alternative once the OTC product was on the market. Given the potential cost-savings associated with OTC loratadine (compared to the prescription only competitors) and the high likelihood of switching, it appears that state Medicaid programs should consider coverage of both prescription and OTC products.

ASTHMA/ALLERGY (including ARDS)

ASTHMA/ALLERGY (including ARDS)—Quality Of Life/Adherence/Patient Preferences

PAA15

INVESTIGATION OF THE DETERMINANTS OF ADHERENCE IN ASTHMA USING Q METHODOLOGY

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OBJECTIVE: To identify patient behaviors that affect adherence regarding asthma and its management using Q-methodology. New insight into patient attitudes may facilitate further development of interventions, which remove barriers affecting adherence in asthma. While many theoretical frames have been proposed, this is the first application of Q-methodology to this problem. **METHODS:** A literature search, and interviews with clinicians and patients were used to create a concourse of reasons for non-adherence in asthma. The raw set of ideas in the concourse were defined, clarified and combined into more mean-